

AUG 11 2006

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Haixiang He                      Examiner: H. Nguyen  
Serial No.: 09/842,604                      Art Unit: 2142  
Filed: April 26, 2001                      Attorney Docket No.: 13774BAUS01U  
Title: METHOD AND APPARATUS FOR PRODUCING A MULTICAST TREE

**CERTIFICATE OF FACSIMILE TRANSMISSION**

I hereby certify that this document, along with any other papers referred to as being attached or enclosed, is being Transmitted via Facsimile to (571) 273-8300 on August 11, 2006.

  
John C. Gorecki, Reg. No. 38,471

M.S. AF  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450


**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Dear Sir:

Applicants request review of the final rejection in the above-identified application. No amendments are being filed with this request. This request is being filed with a notice of appeal. The review is requested for the reason(s) stated on the attached sheet(s). This request is signed by the attorney of record.

If any fees are due in connection with this filing, the Commissioner is hereby authorized to charge payment of the fees associated with this communication or credit any overpayment to Deposit Account No. 502246 (Ref. NN-13774).

Respectfully Submitted



John C. Gorecki  
Registration No. 38,471

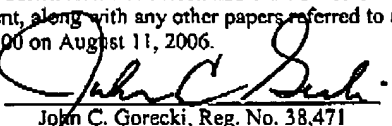
Dated: August 11, 2006

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**STATEMENT OF REASONS IN SUPPORT OF**  
**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Dear Sir:

Applicants respectfully submit that the Examiner committed legal error by failing to afford the preamble of the claims patentable weight. Accordingly, for the reasons stated in the Amendment filed July 6, 2006, (see pages 8-11) the claims of this application should be allowed.

**1. The preambles of the independent claims must be afforded patentable weight.**

To determine whether a preamble limits a claim, the preamble is analyzed to ascertain whether it states a necessary and defining aspect of the invention, or is simply an introduction to the general field of the claim. On Demand Machine Corporation v. Ingram Industries, Inc., 442 F.3d 1331 (Fed. Cir. 2006). Stated another way, the claim must be analyzed to determine whether the preamble is "necessary to give life, meaning and vitality to the claims..." Poly-America, L.P. v. GSE Lining Tech., Inc., 383 F.3d 1303, 1309-10 (Fed. Cir. 2004). To do this, it is necessary to determine whether preamble recites a fundamental aspect or characteristic of the invention. Id. Additionally, where a patentee relies on the preamble during prosecution, the preamble will be considered limiting. General Elec., Co. v. Nintendo, Ltd., 179 F. 3d 1350, 1361-62 (Fed. Cir. 1999).

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In this application, the preamble of claim 1 initially recited:

1. A method of producing a multicast tree for a multicast in a network, the network including a plurality of network devices that are members of the multicast, a set of the network devices each including a multicast database that is protocol independent, the method comprising:

In the Office Action dated 10/06/2004, the Examiner examined claim 1, which had this preamble, and rejected claim 1 under 35 USC 102 as obvious over Haggerty and Cheng. The Examiner did not indicate, in that Office Action, that the preamble was not given patentable weight. Indeed, from the text of the rejection it appears that the Examiner had interpreted the claim to give the preamble patentable weight at this point in prosecution. (See Office Action dated 10/06/2004 at paragraph 5).

Although applicants didn't amend claim 1 in response to this rejection, applicants argued in response that Haggerty failed to teach "a method for use on a network including a set of network devices which each includes a multicast database that is protocol independent." (See Response dated January 19, 2005 at pages 8-9). Applicants note that this argument is directed to the last line of the preamble of claim 1. Thus, from the very beginning of prosecution, applicants have taken the position that the preamble states a necessary and defining aspect of the invention.

In the subsequent Office Action dated 4/22/2005, the Examiner provided additional details as to where Haggerty taught protocol independent multicast databases, which were, at that time, recited in the preamble of claim 1. (See Office Action dated 4/22/2005, at pages 3-4). In response, applicants amended the preamble of claim 1 in the following manner:

1. A method of producing a multicast tree ~~for a~~ from existing multicast information in a network, the network including a plurality of network devices including at least a plurality of routers that are members of the multicast, a set of the network devices routers each including a multicast database that is protocol independent, the method comprising:

Applicants also made other conforming amendments to the several method steps of claim 1 to conform the body of the claim to the preamble. (See Amendment dated July 1, 2006, at page 2). These amendments were made pursuant to an agreement reached with the Examiner during an interview, during which the Examiner indicated that the amendments to the preamble (and conforming amendments to the claim elements) would overcome the rejection over Haggerty and Cheng. (See Amendment dated July 1, 2006 at page 7).

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After conducting a further search, the Examiner entered a new rejection under 35 USC 102 over a newly cited reference, Ahearn. (See Office Action dated 9/22/2005 at paragraph 5). In this rejection, the Examiner explained that, in the Examiner's view, Ahearn taught all limitations of claim 1 including the preamble of claim 1. (Id. at paragraph 6). In response, applicants filed an Amendment dated January 23, 2006, in which the preamble of claim 1 was amended as follows:

A method of producing a multicast tree for an application configured to use a first multicast routing protocol from existing protocol independent multicast routing information in a network, at least some of the protocol independent multicast routing information having been created from multicast information associated with an application configured to use a second multicast routing protocol, the network including a plurality of network devices including at least a plurality of routers that are members of the a multicast associated with the multicast tree, a set of the routers each including a protocol independent multicast database containing the that is protocol independent multicast routing information, the method comprising the steps of:

Conforming amendments were also made to the body of the claim so that the preamble and body were consistent. (See Amendment dated January 23, 2006, at page 2). In the remarks section of this paper, applicants provided extensive arguments that the claim as amended (primarily the preamble as amended) was not taught by Ahearn. (See Id. at pages 8-12, and particularly in the last paragraph of page 12 before the heading "Conclusion").

Based on applicant's arguments and amendment of claim 1, the Examiner withdrew the rejection of claim 1 over Ahearn and entered a new ground of rejection, rejecting claim 1 over Shaughnessy. (See Office Action dated April 11, 2006, at paragraphs 5-8). In this rejection, the Examiner extensively addressed the preamble of claim 1 and pointed out specific places where the Examiner believed Shaughnessy taught the aspects of claim 1 that were recited in the preamble. (See Id. at paragraph 8).

In response, although applicants didn't further amend the preamble, applicants provided arguments that Shaughnessy failed to teach or suggest claim 1, relying in part on the preamble of claim 1 to distinguish the claims from the teachings of Shaughnessy. (See Amendment dated July 6, 2006 at pages 8-11, and more particularly at page 10, last two paragraphs, and on page 11).

Thus, during the entire course of prosecution of this application, both applicants and the Examiner have treated the preamble as a part of the claim that provides vitality and meaning to

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the remaining limitations of the claim. Indeed, amendments to the preamble to claim 1 were at least partially responsible for withdrawal of at least one if not two separate rejections of the claims over different pieces of prior art during the course of prosecution of this application.

Now, after four Office Actions and four responses by applicants, the Examiner has taken the position in the Advisory Action dated July 31, 2006, that the preamble is not limiting. Specifically, the Examiner has now taken the position that the limitations in the preamble have not been given patentable weight because the recitations occur in the preamble. (See Continuation Sheet (PTO-303) to Advisory Action dated July 31, 2006).

Under the circumstances present in the course of prosecution of this application, it was legal error for the Examiner to fail to afford the preamble patentable weight since the recitations in the preamble of claim 1, and the other independent claims, were clearly relied on during prosecution to distinguish the claims from the cited art. See General Elec., Co. v. Nintendo, Ltd., 179 F.3d 1350, 1361-62 (Fed. Cir. 1999).

Additionally, where the preamble is "necessary to give life, meaning and vitality to the claims..." Poly-America, L.P. v. GSE Lining Tech., Inc., 383 F.3d 1303, 1309-10 (Fed. Cir. 2004), it must be considered to be part of the claim and, hence, limiting. To determine if this is the case, the preamble should be analyzed to determine whether it provides more than merely an introduction to the general field of the claim. On Demand Machine Corporation v. Ingram Industries, Inc., 442 F.3d 1331 (Fed. Cir. 2006). In this application, claim 1 as a whole currently recites:

1. A method of producing a multicast tree for an application configured to use a first multicast routing protocol from existing protocol independent multicast routing information in a network, at least some of the protocol independent multicast routing information having been created from multicast information associated with an application configured to use a second multicast routing protocol, the network including a plurality of network devices including at least a plurality of routers that are members of a multicast associated with the multicast tree, a set of the routers each including a protocol independent multicast database containing the protocol independent multicast routing information, the method comprising the steps of:

accessing a plurality of *the protocol independent multicast databases*;  
retrieving at least a portion of *the existing protocol independent multicast routing information* from each accessed protocol independent multicast database;  
and

tracing the retrieved existing protocol independent multicast routing information to form *the multicast tree*.

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As is apparent, the preamble of claim 1 clearly recites "a necessary and defining aspect of the invention" since it provides antecedent basis for the highlighted terms shown in italics. Additionally, given the complexity of the preamble, the preamble clearly does more than merely set forth the field of the invention. Rather, the preamble provides life, meaning and vitality to the claims and the precise wording has been the subject of continued discussion between the applicant and the Examiner. Accordingly, the Examiner's decision to not afford the preamble patentable weight at this point in prosecution should be reversed. Although only claim 1 has been argued herein, similar arguments may be made with respect to the preambles of the other independent claims (claims 10, 18, and 26) and, therefore, the rejection of these claims should be reversed as well.

## 2. Merits of the Examiner's rejection

Once the preamble of the claims has been afforded patentable weight, reversal of the rejection is required based on applicant's arguments submitted in the Amendment dated July 6, 2006 (See pages 8-11). Specifically, applicants respectfully submit that the claims are allowable over the art of record for the reasons stated therein.

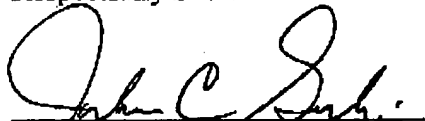
## Conclusion

For the reasons set forth above, applicants respectfully request that the Examiner's decision to not afford patentable weight to the preamble of the independent claims be reversed. Additionally, for the reasons set forth in the Amendment dated July 6, 2006 at pages 8-11, applicants respectfully request that the rejections set forth in the Office Action dated April 11, 2006, be reversed.

Dated: August 11, 2006

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